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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,771	07/06/2001	Ichiro Mase	P/2856-22	7693

7590                      07/13/2005  
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EXAMINER

BERNATZ, KEVIN M

ART UNIT                      PAPER NUMBER

1773

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Advisory Action Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 09/900,771	<b>Applicant(s)</b> MASE ET AL.	
	<b>Examiner</b> Kevin M. Bernatz	<b>Art Unit</b> 1773	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 29 June 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires 3 months from the mailing date of the final rejection.
  - b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
- Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

- 3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
  - (a)  They raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  They raise the issue of new matter (see NOTE below);
  - (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

- 4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
- 5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
- 6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
- 7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

AFFIDAVIT OR OTHER EVIDENCE

- 8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
- 9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
- 10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

- 11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.
- 12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_
- 13.  Other: \_\_\_\_\_.

*Kevin M. Bernatz, PhD*  
**Kevin M. Bernatz, PhD**  
Primary Examiner

KMB  
July 12, 2005

Continuation of 11. does NOT place the application in condition for allowance because: regarding applicants' argument that the prior arguments were commensurate in scope with the claims (*page 7 of response*), the Examiner respectfully disagrees.

The Examiner notes that the base claim does not recite a perovskite manganese oxide, the reference EP '647 recites the broad class of  $A_1-xB_xMnO_3$  perovskite manganese oxides (*paragraph 0015*), and the relied upon reference only talks about the failings of Sr or Ca  $LaMnO_3$  perovskite oxides (*Introduction section*). Hence, none of the above are identical in scope.

Regarding applicants' argument that the cited pertinent prior art must be applied in the basis of the rejection (*page 7 of response*), the Examiner respectfully disagrees. In addition, the Examiner respectfully disagrees with applicants' argument that there is no expectation of success in reducing the thickness of the phase-change layer (*page 8 of response*).

The Examiner has rejected the claimed limitation on the basis of it being a results effective variable that one of ordinary skill in the art would have possessed the knowledge to optimize based on the known facts that "thinner = less weight, and hence desirable for space applications" and "thicker = better performance". Applicants argued that the affidavit submitted by Mr. Okamoto proved that one of ordinary skill in the art could not obtain the claimed thickness values. The Examiner pointed to the plethora of prior art references which teach differently, albeit utilizing a different method of production of the perovskite oxide films. Applicants are invited to present evidence that the disclosed methods (i.e. sputtering) would result in either an unobvious difference in the perovskite oxides, or render the perovskite oxides unsuitable for the required use in the EP '647 reference (i.e. incapable of meeting the phase change functional limitations recited in claim 1). Presently, there is no evidence of record that a perovskite oxide formed by sputtering would be any different than the ground perovskite oxide films used by applicants.

As such, the Examiner maintains his position that it would have been obvious to optimize the thickness of the film to within applicants' claimed limitation, since space-based applications clearly desire as reduced a weight as possible and the trade off between weight and performance is both recognized, and within the capability to be optimized, by one of ordinary skill in the art.

Applicants further argue that the "Examiner has failed to show where the EP '647 reference teaches: (1) a motivation to make a thinner phase change layer; and (2) how a thinner phase change layer could reasonably succeed in removing the heat from the object without an additional base layer" (*page 8 of response*).

Applicants are reminded that an invention may be obvious if the prior art has different reasons for doing what the applicant has done. "It has long been held that a rejection under 35 USC 103 based upon a combination of references is not deficient solely because the references are combined based upon a reason or technical consideration which is different from that which resulted in the claimed invention." *Ex parte Raychem Corp.* 17 USPQ 2d 1417, 1424 (BPAI 1990). Cites *In re Kronig* 190 USPQ 425 (CCPA 1976); *In re Gershon* 152 USPQ 602 (CCPA 1967). In addition, the suggestion to combine need not be express and "may come from the prior art, as filtered through the knowledge of one skilled in the art." *Motorola, Inc. v. Interdigital Tech. Corp.*, 121 F.3d 1461, 1472, 43 USPQ2d 1481, 1489 (Fed. Cir. 1997). In the instant case, the base layer is taught as noted in the rejection of record, and the motivation for the reduced thickness is deemed to be clearly within the knowledge of one of ordinary skill in the art, given that the disclosed application would be a space-based application requiring the control of the weight (and hence, thickness).

Finally, applicants appear to be arguing unexpected results in the amount of heat radiated into the external environment upon utilizing the claimed invention (*page 8 of response*). The Examiner respectfully disagrees.

The Examiner notes that the claimed invention is different in scope to the disclosed embodiments meeting the "superlative" performance alleged by applicants. Specifically, the Examiner notes that the base claim does not recite specific materials or thickness values for the "base material", nor specific materials for the "phase-change substance", both of which the Examiner deems would be required for the claims to be commensurate in scope to any alleged showing of unexpected results.